

REMARKS

In response to the Office Action dated January 16, 2008, Applicants have herewith amended the language of Claims 44, 50-53, 57, 73, 74, 76 and 77 to specifically recite the at least one additional corrosion inhibitor as well as the recitation of Claims 50, 52, 53 and 57 that the corrosion inhibitor is a transition metal corrosion inhibitor. The amended language simply more specifically recites the function of the additional material.

New Claims 93-102 are also presented. Generic Claim 93 recites an aqueous absorption solution consisting of water, an alkali metal hydroxide, alkaline earth metal hydroxide or mixture thereof, and at least one heteropoly complex anion. New Claims 94-97, based on original Claims 46-49, respectively, are dependent on new generic Claim 93. These claims specifically restrict and limit the compositions of the absorption solutions, thereby excluding ingredients other than those recited. Similarly, generic Claims 98 and 101 recite absorption solutions consisting of only the chemicals or compounds set forth in the claims, excluding all other material. The new claims are fully supported by the original specification including the claims, and do not present new matter.

Claims 43-63 and 73-77 stand rejected under 35 U.S.C. § 112, ¶ 1, as failing to comply with the written description requirement. The Examiner contends that the claims do not contain subject matter set forth in the original specification in such a way as to reasonably convey to one skilled in the art that the inventors had possession of the claimed invention at the time the application was filed. More specifically, the Examiner objects that the recitation "the sole and only absorbent" is new matter and not supported by the specification because the limitation does not have "literal basis in the specification as originally filed." Applicants submit that the Examiner is incorrect. In Applicants' original specification, paragraph 13, the specific embodiment of using an alkali metal and/or alkaline earth metal hydroxide solutions as absorption fluids is described. There is no statement, suggestion or reference that any other absorbents are to be present in the embodiment. There is no teaching or suggestion of mixing or adding any other absorbents with the alkali metal and/or alkaline earth metal hydroxide solutions. Thus, there is simply no basis whatever of the Examiner's allegation that Applicants did not have possession of the claimed invention of an absorbent solution in which the only absorbent is an alkali metal hydroxide and/or alkaline earth metal hydroxide. If the Examiner persists in this

rejection it is requested that specific facts supporting the rejection be presented pursuant to MPEP §2163.04, and not a mere unsupported conclusion as set forth in the Office Action.

The Examiner further alleges that the limitation of the alkali metal and/or alkaline earth metal hydroxide solutions as the only absorbents lacks literal basis, citing *ex parte Grasselli*. The Examiner's reliance on the cited case is not well taken and, frankly, the case does not support the Examiner's position. Indeed, in the opinion, *In re Anderson*, 176 USPQ 331 (CCPA 1973), was cited by the Patent Office Board of Appeals as controlling law. The *Anderson* decision specifically holds that in determining if an amendment is new matter is not a question as to whether a word or words added to a claim are words used in the specification, but instead, whether there is support in the specification for the concept recited. Thus, the *Anderson* holding is that literal wording in a specification is not required, but rather whether the concept is supported in the specification. Applicants submit that the description of the embodiment set forth in paragraph 13 of the original application regarding use of alkali metal and/or alkaline earth metal hydroxide solutions as absorption fluids without further teaching or mention of combining those absorbents with any other absorbents certainly supports the language of the claims and would clearly convey to one skilled in the art that the inventors had possession of the claimed invention at the time the application was filed.

Claims 53-63 and 73-77 stand rejected or objected to on the Examiner's allegation that there is insufficient antecedent basis for transition metal halides in the claims. Applicants have amended Claims 53, 73, 74, 76 and 77 to recite that the transition metal halides are corrosion inhibitors and added as such and in concentrations such as to provide corrosion inhibition. It is submitted that there is clear and sufficient antecedent basis for the transition metal halide corrosion inhibitor in the claims and disclosed in Applicants' specification. The Examiner's statement that such compounds are known absorbents is irrelevant and unsupported. Accordingly, the rejection or objection is improper.

Claims 43-56 and 73-75 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Chandler et al. and Rockenfeller in view of Verma et al. The rejection is respectfully traversed, and any rejection of the newly submitted claims based on that combination of references is traversed. It is submitted that the Examiner has taken the teachings of the respective references out of context, and using hindsight, based on Applicants' specification, and has mischaracterized

the teachings of the prior art in an attempt to reconstruct Applicants' invention, without regard to the entire teachings of the references. Indeed, it is submitted that the Examiner has picked and chosen only so much of the references as supports the Examiner's position, without regard to and ignoring the entire teachings of the references in the context of the described inventions. For example, the Examiner concludes that it would have been obvious to one skilled in the art to modify the Chandler et al. absorption fluids by incorporating the molybdate corrosion inhibitors taught by Verma et al. to minimize corrosion in metal halide refrigeration systems. The Examiner says that Chandler et al. teaches the functional equivalence of halide and hydroxide refrigerants. Applicants submit that the Examiner is mistaken.

Contrary to the Examiner's conclusion, Chandler does not teach the functional equivalence of halide and hydroxide refrigerants. The Chandler et al. invention is directed specifically to the addition of amine compounds for increasing the rate of water vapor absorption in alkali metal salts or alkali metal hydroxide absorption solutions. There is no statement or teaching in the reference that alkali metal halides and alkali metal hydroxides are equivalent refrigerants. Instead, the Chandler et al. specification simply discloses that the use of amines for increasing the rate of water vapor absorption works for either alkali metal salts or alkali metal hydroxide solutions. It is submitted that such a teaching does not support the Examiner's position that the reference broadly teaches the functional equivalence of halide and hydroxide refrigerants, let alone as equivalent absorbents for use with all corrosion inhibitors. The Examiner then illogically modifies Chandler et al. to incorporate Verma's heteropoly complex anion corrosion inhibitors which are taught only for use in alkali metal halide solutions.

The Examiner argues that Chandler "invites the inclusion of molybdate corrosion inhibitors." While it is true that Chandler et al. describes a list of well known corrosion inhibitors which include molybdates and others well known in the art at the time of the Chandler et al. application filing, it must not be overlooked that the Verma et al. reference specifically teaches that the type of molybdates Chandler et al. refers to are problematic. The Examiner's attention is specifically directed to page 3, lines 13-28, of Verma et al. which specifically teaches away from using the molybdates as corrosion inhibitors because of various specified problems. Verma et al. teaches that molybdates exhibit limited solubility in alkali metal halide solutions, and are unstable and difficult to maintain in suitable concentrations. It is submitted that one

skilled in the art reviewing the Verma et al. description of the problem of molybdates with halide solutions would not be led to use molybdates in hydroxide solutions. Accordingly, the teachings of the two references simply do not square up, are incompatible, and do not fairly teach one skilled in the art to use molybdates in alkali metal hydroxide or alkaline earth metal hydroxide solutions. Again, Applicants submit that the Examiner has impermissibly picked and chosen only so much of the Chandler et al. and Verma et al. references as supports a case for obviousness of Applicants' claimed invention; see *In re. Wesslau*, 147 U.S.P.Q. 391 (CCPA 1965); *In re. Rothermel*, 125 U.S.P.Q. 328 (CCPA 1960); *In re Vogel, et al.*, 150 U.S.P.Q. 445 (CCPA 1966). Moreover, Applicants submit that the additional Rockenfeller reference adds nothing to the Examiner's position, and indeed, makes the attempt to combine the teachings even more confusing. Rockenfeller teaches that certain aqueous water vapor absorption compositions have improved solubility ranges and increased temperature lifts by adding specified organic compounds. Rockenfeller's disclosure of cobalt metal halide is for an use as an absorbent has nothing to do with corrosion inhibition as proposed by the Examiner.

The Examiner has combined a number of other secondary references listed in various rejections in paragraphs 10-14 and in over six pages refers to additional combinations of references and rejections, all based on the original combination of Chandler et al. and Rockenfeller in view of Verma et al. as discussed hereinabove. Applicants do not believe it is necessary to discuss each of those additional secondary references, since they add nothing to the improper combination of Chandler et al. and Verma et al. as discussed hereinabove, and for the sake of brevity, are not described or discussed further hereinafter. Applicants' position is that if the rejections to generic Claims 43, 73 and 76 are improper, then so are the rejections of the dependent claims based on the additional references.

New Claims 93-102 are clearly patentable over the teachings of references as combined by the Examiner in the rejections of record. There is no teaching or suggestion in the combined references of an aqueous absorption solution consisting of an alkali metal hydroxide, alkaline earth metal hydroxide or mixture thereof, and a heteropoly complex anion as recited in new Claims 93-97, or the specific compositions recited in Claims 98-102. Again, Applicants must point out that Chandler et al. does not teach equivalency of alkali metal halide, alkali metal hydroxide, and alkaline earth metal hydroxide absorbents, but instead teaches only that amines

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are useful as improving water vapor absorption of such solutions. Moreover, again, Verma et al. specifically warns against using then well-known molybdate corrosion inhibitors with alkali metal halide absorption solutions, and makes no statement whatsoever of using the heteropoly complex anions as corrosion inhibitors for hydroxide compositions.

It is submitted that the amended claims herewith and new claims are patentable over the references and rejections of record for the reasons set forth hereinabove.

No Disclaimers or Disavowals

Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, the Applicants are not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. The Applicants reserve the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that the Applicants have made any disclaimers or disavowals of any subject matter supported by the present application.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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Dated: _____

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